



## **EU ELECTRIFICATION ACTION PLAN** **Securing a Competitive, Resilient, and Sustainable Future for Europe's Industries**

Wednesday 25 February 2026  
18h00 Cocktail – 18h30 Roundtable – 19h30 Dinner & Debate  
Members' Salon, European Parliament

*Organised in partnership with WINDEUROPE*



## INTRODUCTION BY EUROPEAN PARLIAMENTARY HOST



Radan KANEV MEP (EPP, Bulgaria) Environment Committee & Industry, Research and Energy Committee

Let me thank the European Forum for Manufacturing for the pleasure and honour of hosting this event. Allow me to make a few brief remarks before we begin.

First, I would like to thank all our speakers, and especially our colleagues from the European Parliament.

I will not take more of your time, as I am very much looking forward to hearing from our speakers and to addressing the many unresolved questions surrounding the electrification of European industry.

This is an ongoing debate. Over the past years, we have developed a clear agenda – yet progress remains limited. It is evident that significant challenges remain, and much work lies ahead if we are to move forward together.

With that, I will stop here and pass the floor to the representative of the European Commission from DG Energy. Mr. Kolinski will deliver the first keynote address.

## EUROPEAN COMMISSION KEYNOTE SPEECH



Lukasz Kolinski, EUROPEAN COMMISSION, DG ENER, Director for Green Transition and Energy System Integration  
*(revised text)*

A great deal is happening at the moment – here in the Parliament, in the Commission, and in the Council – on energy and electricity. And that is a very positive sign. It shows that the energy transition, and electrification in particular, is seen not merely as an obligation, but as a real opportunity.

From the Commission’s perspective, electrification is a policy area that effectively ticks all the boxes of our core energy objectives: affordability and competitiveness, sustainability, and security of supply.

Let me briefly explain why.

On affordability and competitiveness, electrified solutions are typically far more efficient than combustion-based alternatives. When the technologies are available – and in many cases they already are – this efficiency translates into lower operating costs and stronger competitiveness.

On security, electrification strengthens our resilience. Europe’s electricity system is increasingly based on homegrown energy sources. Last year, for the first time, wind and solar together generated more electricity than fossil fuels in the EU. That is a significant milestone and a powerful argument in favour of electrification.

On sustainability, the direction is equally clear. Our electricity system becomes greener every year. As the power mix decarbonises, electrification becomes an even more effective pathway to reducing emissions across sectors.

And yet, the electrification rate in the EU has stagnated at around 23%. Our modelling shows there is potential for it to be significantly higher in the coming years.

So, the question is: what is holding us back? We see several barriers.

One of the most straightforward is the lack of a level playing field between electricity and gas or other energy carriers. Taxation structures in many Member States still favour fossil fuels. This erodes much of the efficiency advantage that electrified solutions can provide.

The Commission has been clear: taxation should move toward a more balanced framework between electricity and gas. Some Member States are taking steps in this direction, but not enough, and certainly not fast enough.

Another key issue is confidence.

For businesses and consumers to electrify their demand, they must be confident that electricity supply will expand in parallel and that prices will remain affordable.

Energy prices remain a central political issue in the EU. On average, electricity prices are still above pre-crisis levels. Prices differ significantly across the EU. In some countries, when clean energy is not sufficient to meet the demand and fossil-fuel power is called for, the prices increase significantly. Countries with adequate capacities and a significant share of low-carbon electricity – renewables and, where chosen, nuclear – tend to have lower electricity prices. Deployment of clean energy is the structural way forward on this front.

If we look more closely at the system, across the EU, over the last years, we have been seeing record numbers of negative price hours – hours during which consumers are effectively paid to consume electricity. This calls for higher efficiency and flexibility in the energy system.

This is why beyond the supply, we are also working the system interface.

In December, the Commission presented the European Grids Package. It will help better use our existing grid infrastructure and accelerate the necessary expansion to accommodate a more decentralised and electrified power system.

Flexibility is another essential element. In some Member States, limited flexibility is also a key driver of price spikes. Removing the barriers to and accelerating flexibility is critical if electrification is to accelerate.

On the contractual side, long-term instruments such as Power Purchase Agreements [PPAs] and Contracts for Difference [CfDs] are vital tools to provide long-term price and investment stability for renewable developers and for industrial off-takers.

We did see a slowdown in the PPA market last year. One explanation may be that in the presence of frequent negative price hours, some off-takers prefer to benefit from short-term market conditions rather than commit to long-term contracts. While that may be a rational short-term decision, promoting PPAs remains closely linked to advancing electrification.

Turning to the demand side, we have undertaken detailed sector-by-sector analysis across industry, transport, and buildings. The good news is that many solutions already exist. In industry,

electrification seems viable for low-temperature processes – for example through heat pumps, electric boilers, and similar technologies. If taxation were more balanced between electricity and gas, the business case would improve significantly.

In transport, electrification is progressing, especially in passenger vehicles, where sales of electric vehicles continue to grow.

In buildings, particularly residential buildings, the potential for further electrification remains substantial.

There is also a role for targeted support mechanisms. You have seen the pilot auction on industrial decarbonisation, focused on industrial heat, with a budget of €1billion. The initial results are promising. Such instruments can help catalyse electrification and set examples for broader market uptake.

All of these elements feed into our work on the upcoming Electrification Action Plan, which we aim to present later this year.

Finally, this initiative is closely linked to another key policy area: heating and cooling. The boundaries between electrification and heat policy are increasingly blurred due to the system integration. That is why we are advancing on the preparation of the Electrification Action Plan in parallel with a new Heating and Cooling Strategy, taking a comprehensive system-wide perspective.

And once the Electrification Action Plan is out, I believe it would be valuable to reconvene and discuss how the proposed measures can be implemented – across Member States and across the sectors you represent.

#### OPENING INDUSTRY VIEW



Alfredo Parres, HITACHI ENERGY, Group Senior Vice President and Head of Renewables

This event brings together policy makers, energy users, energy suppliers, grid and technology companies, and the digital sector around one table – exactly the coalition Europe needs to get electrification right.

It is a pleasure to speak on behalf of Hitachi Energy, a global leader in grid technologies, with strong European roots and 250 years of engineering heritage on this continent

For Hitachi Energy, the “Electricity Era” is not a slogan; it is the reality our employees and customers live in.

The question is no longer what to electrify – we know this – there is well identified low hanging fruit to prioritise. The real questions are how we electrify, and how fast we can do it while keeping Europe competitive, resilient and sustainable.

Let me be blunt: the technology exists today. The bottleneck is not innovation – it is the speed and scale of deployment. We also know that a renewables-based energy system is cheaper than any other scenario as it was demonstrated in the recent study commissioned by WindEurope and performed by my Company.

From an industry and grid perspective, the answer fits into four priorities:

- put grids at the heart of the Electrification Action Plan
  - make electrification system-friendly through flexibility
  - give investors long-term visibility so they can build at scale – and
  - ensure effective delivery.
- Grids – As Economic Infrastructure.  
If Europe wants a successful Electrification Action Plan, it must first have a Grid Action Plan that is just as ambitious, because every additional megawatt of clean electricity ultimately travels through a network.

Today the grid is the primary bottleneck, not generation. With 50% of EU electricity already coming from renewables, the constraint has shifted decisively from generation to transmission and distribution.

Around 500 gigawatts of wind projects alone are waiting for grid connection permits across Europe. At the same time, congestion management cost European consumers close to €9 billion euros in 2024, and seventy-two terawatt-hours of clean electricity were curtailed – equivalent to Austria's entire annual consumption. That is value –haemorrhaging out of the system.

Grids are not a cost centre at the edge of the system; they are strategic economic infrastructure – every euro invested in grids generates over two euros in system savings by 2040.

This means planning and investing in transmission and distribution networks as strategic assets for Europe's competitiveness, not as an afterthought to generation.

Concretely, National Energy and Climate Plans should include binding electrification milestones and clear grid-related performance indicators, not only for the next decade but looking well beyond ten years, aligned with industrial investment cycles.

We must think in decades, not in electoral cycle. Grid projects take ten years or more, and the energy transition requires infrastructure decisions that extend beyond our own lifetimes.

It also means massive and smarter investment in both new networks and the enhancement of existing ones. Europe needs to invest hundreds of billions in grid infrastructure by 2030, yet current investment is falling 15% – 40% short of requirements.

High-voltage direct current interconnections can move huge volumes of renewable power across borders and from offshore wind farms to industrial centres, strengthening security of supply and the single market for electricity.

At the same time, advanced grid-stabilisation systems based on power electronics allow more renewables and more electrified industry to connect to existing grids without waiting years for new lines to be built. Permitting must be accelerated dramatically. Current approval times of five to six years are fundamentally incompatible with the pace of the transition.

We welcome the Commission's EU Grids Package proposals on digitalized permitting and the shift to "first ready, first served" – they point in the right direction.

Offshore wind is another area where grids will make or break Europe's ambitions. To turn offshore wind into the new baseload of a decarbonized system, Europe needs coordinated development of onshore and offshore grid infrastructure and support for hybrid

interconnectors, meshed offshore grids and interoperable technologies – moving from pilot projects to gigawatt-scale execution.

- **Electrification Has to Be System-Friendly – And That Means Flexibility.**

As more transport, heating, industry and data centres move to electricity, simply adding demand at the wrong time will strain networks and raise costs for everyone. What Europe needs is a framework that turns this new electrified demand into part of the solution.

Grid technologies, digitalization and demand response can allow large consumers to adapt consumption in near real time and support system stability. In practice, this means industrial plants, data centres and high-power EV charging hubs that can not only draw power but also provide services back to the system, such as frequency support, congestion relief or voltage control.

Hitachi Energy is already working with customers to transform data centres from pure loads into flexible grid-support assets.

But flexibility will not emerge at scale on goodwill alone. It requires clear market rules and predictable revenue streams so that industrial and commercial actors are rewarded when they help the system. The Electrification Action Plan should enshrine flexibility as a core design principle, from connection grid codes and network planning to remuneration.

- **None of This Will Happen at the Necessary Speed Without Long-Term Visibility, Affordability and Supply-Chain Resilience.**

Investments in grid manufacturing capacity, in transmission and distribution infrastructure, and in large-scale electrification on the demand side are long-lived, capital-intensive decisions. They depend on confidence that the rules will be stable, that policies will be enforced, and that clean electrification will be economically attractive compared with fossil alternatives.

Let me be clear on affordability: without affordable energy, Europe cannot compete with the rest of the world.

Electrification rates in Europe are stagnating at around twenty-five per cent, while competitors like China are surging ahead. Tax and levy structures should support – rather than penalise – electrification, so that using clean electricity is consistently more attractive than burning fossil fuels. The European Commission should take the lead by publishing its guidance on electricity taxation, and then national governments must act.

The European Commission announced, one year ago under the Affordable Energy Action Plan, its intention to publish Recommendations to Member States on reducing electricity taxation and levies. Publishing these Recommendations is now essential to support national reforms, correct distorted price signals, and strengthen the business case for electrification.

For offshore wind in particular, well-designed two-sided contracts for difference remain one of the most effective ways to de-risk investment and stabilize costs for consumers – the wind industry's own commitment to reduce offshore wind costs by 30% by 2040 shows the ambition is there once visibility is granted.

In parallel, policy must support a robust supply chain for grid technologies. Transformer lead times have jumped from between six and eight months to forty months. Europe leads the

world in transmission and distribution technology; we must maintain this strategic advantage. Hitachi Energy is backing this with action – investing \$9billion in capacity expansion globally, with significant commitments across European factories in Germany, Spain and Finland.

- We Must Ensure Delivery

The Davos Forum and other relevant stakeholder meetings put it clearly: it is time for action and delivery. Both the Grids Package and the Electrification Plan are compelling initiatives to get our act together across Europe and across society to deliver the energy security and the industry competitiveness Europe needs. But we need to have a clear governance structure and a transparent monitoring process to ensure Member States become accountable to finance and deliver according to the plan and targets.

At the same time, delivery depends fundamentally on regulatory certainty. Electrification, renewable generation, and grid investments require confidence that Europe's core market frameworks remain stable. Repeated reopening of debates around the Electricity Market Design or the Emissions Trading System [ETS] risks creating investment hesitation precisely when acceleration is needed. Stability, predictability, and consistent implementation are therefore not abstract principles — they are prerequisites for investment, industrial planning, and infrastructure deployment at scale.

Let Me Leave You with Four Concrete Messages:

- Make grids and electrical infrastructure the backbone of the EU Electrification Action Plan, with clear long-term planning, accelerated permitting and priority treatment in investment and enforcement.
- Design electrification so that it strengthens the power system through flexibility, by enabling large consumers and new digital loads to actively support the grid.
- Give the market long-term clarity, affordable energy and stable, predictable rules so that companies can invest confidently in Europe – from offshore wind and industrial electrification to manufacturing the grid technologies that make it all possible.
- Make Member States accountable for delivering on their promises. Provide long-term regulatory certainty. Stability in the Electricity Market Design and the ETS is essential to unlock investment at scale.

The technology exists. The demand exists. What Europe needs now is the political courage and the execution speed to match its ambition.

Hitachi Energy stands ready to partner to make that future a reality.

## THE DEMAND ANGLE – VIEWS FROM ENERGY USERS

Robert Jeekel, ARCELORMITTAL EUROPE, Head of European Institutional Affairs



Let me begin with a very concrete point: the main challenge for our industry today is securing the conditions necessary to invest in Europe.

I am pleased to say that just last week, ArcelorMittal announced a major new investment in France. It is a significant project. And the reason it is taking place in France is straightforward: there, we have access to electricity at internationally competitive rates.

We operate plants in many European countries. Our challenge is to transform from a carbon-intensive industry, based on blast furnaces, into an electro-intensive one. This transformation is central to our decarbonisation pathway.

However, if electricity prices in Europe remain too high, this transition simply cannot happen. There is no business case for investment. And without investment, plants will eventually close. That is the fundamental issue we must address: how do we bridge this gap?

Last year, with the new Commission mandate and the Antwerp Declaration for a European Industrial Deal, there was a strong sense of momentum. We expected an Affordable Energy Plan that would tackle the core issue – electricity prices.

Instead, what we saw were measures focusing on taxes and add-ons, areas that were already relatively limited. But the real problem – wholesale electricity prices was not addressed. We then looked to other possible instruments: Contracts for Difference (CfDs), Power Purchase Agreements (PPAs), and state aid mechanisms.

However, the revised State Aid rules – particularly the Clean Industrial Deal State Aid Framework [CISAF] – have significantly constrained investment possibilities. Support is limited in duration and volume, and accumulation rules restrict long-term certainty. With such constraints, it is not realistic to undertake major industrial investments that require a ten year horizon.

The guidelines for CfDs adopted last year also require a close link to market prices. In practice, this makes them difficult to use for large-scale industrial electrification. We cannot absorb the risks under those conditions.

There are ongoing discussions about structural market reform – about merit order changes and other systemic adjustments. These are important debates. But we do not have time to wait for fundamental redesigns of the electricity market.

We need solutions now.

Mario Draghi made a clear point: when low-cost power is already supported by society, it should not be sold back to the market at multiples of its production cost. It should also serve society by supporting industrial competitiveness. He proposed that Member States should be enabled – within state aid frameworks – to channel low-cost electricity toward long-term industrial investments in electrification, particularly where industries are shifting from carbon-intensive to electro-intensive production.

So far, this proposal has not been translated into action.

Today, for the first time in five years, all energy-intensive industries have issued a joint paper. This in itself reflects the seriousness of the situation. Too many closures have taken place. The crisis has become too severe to ignore.

The Joint Position calls for internationally competitive electricity prices – identified at around €50 per megawatt hour – covering the full price, not just wholesale components. It also calls for improvements to state aid rules – CISAF - to allow long-term support, over ten years, to enable real investment decisions.

We are not here to demand a complete redesign of the electricity market. We understand the complexity of such reforms. But we urge policymakers to:

- operationalise the Draghi proposal for energy-intensive industries,
- adapt and improve state aid rules to enable long-term electrification investments, and
- actively incentivise Member States to implement these measures.

The stakes are simply too high. The crisis facing European industry is real. And yet, it is solvable.

There is always a reason to delay action. There is always a technical argument to block progress. But at this moment, the importance of preserving Europe's industrial base outweighs hesitation. Electrification is possible. Industrial transformation is possible. But only if the framework conditions make investment viable.

Our plea is simple: save European industry. It can be done – but action must be taken now.



Karen Massin, GOOGLE, Head of EU Government Affairs and Public Policy

- Europe is entering a new era of innovation that has the potential to profoundly enhance the region's global competitiveness and prosperity.

AI technologies are revolutionising people's daily lives, driving economic growth, speeding up scientific breakthroughs, and helping society tackle major collective challenges from global health to the environment. Broad adoption of AI could unlock major efficiencies that improve the security of the grid, reduce carbon emissions, and boost Europe's GDP over the next decade by

€1.2 trillion

- In the Energy Sector, AI can be a powerful catalyst for a cleaner, more efficient, and resilient grid.  
For example: AI can empower grid operators to connect new clean energy sources faster and more reliably, reducing project connection bottlenecks. We are already doing this in the US with North America's largest grid operator and we will be eager to explore how to apply it here in Europe.
- For over a decade, we have been investing in Europe's digital infrastructure  
– with 9 data centres, 13 cloud regions, and 6 subsea cables that connect Europe to the world  
– all in partnership with European companies.
- But we know that digital infrastructure, which powers Europe's digital transition, cannot exist without energy.

We are proud to be a long-term investor in Europe's clean energy transition. Our ambition to operate our data centres on 24/7 carbon-free energy by 2030 directly contributes to the EU's strategic agenda for affordable, secure, homegrown clean energy systems.

- Partnerships with local project developers, grid operators and innovators are fundamental to meeting this goal.  
Today, Google is one of the largest purchasers of clean energy in the world. We have brought over 4.5 gigawatts of new renewable energy to the European grid. In four countries (Belgium, the Netherlands, Denmark and Finland) our data centres already operate on 80% or more locally-sourced, carbon-free energy, hour-by-hour.
- We are committed to being a 'good grid citizen' and bringing value to the European grids where we operate.  
We want to ensure that when we expand digital infrastructure, we are catalysing grid investments that help local businesses and communities. For example, in Germany, we are partnering with the local district heating provider to supply the local community with carbon-free heat. This is our second heat recovery project in Europe, after our first such project in Finland. We have even pioneered new models, like our recent deal in the Netherlands that extended the life of the country's oldest offshore wind farm.
- To seize the full opportunity of the digital transition and meet the electricity needs required and achieve Europe's energy security, competitiveness and decarbonization goals, we need to make affordable, reliable, clean energy more readily available.

From our end, we see collaboration as essential:

- **To Unlock Grid Capacity We Need More Proactive, Future-Proof Planning**  
This means improving data sharing between System Operators and large energy users to enable the necessary investments. For example, integrating forward-looking demand forecasts into network planning and publishing standardized capacity maps, can enable the investments to meet Europe's re-industrialization goals.
- **We Must Accelerate Connections to the Grid**  
On the demand side, we need to streamline permitting and reform queue management. We must ensure that mature, ready-to-build projects get access to the grid. Waiting times for generators and demand customers are an average of 7-10 years or even up to 13 years in some markets depending on network constraints.
- **We Must Build a Grid That Is Smarter, Not Just Bigger**  
While building new lines can take years, Grid-Enhancing Technologies (GETs) can unlock between 20% - 40% more capacity on existing lines in months. AI itself can be part of the solution, helping to optimize grid management and integrate variable carbon-free energy sources more efficiently.
- **Investing In the Next Generation Of Energy Innovation Here In Europe and Globally Is Also Critical.**  
We need to scale advanced clean energy technologies which are vital for providing firm, carbon-free power. Our partnership with Italy's Energy Dometo deploys their first-of-a-kind CO<sub>2</sub> battery as a long-duration energy storage technology, and our recent landmark investments in the US in our first advanced nuclear and in enhanced geothermal projects are examples of how we can accelerate this transition to secure, carbon-free energy.
- **And last, but not least, we see a great opportunity to leverage private capital not only for deploying new clean technologies, but also in the future for the major offshore and onshore grid investments.**

We are happy to see that the recent Grids Package addresses many of these points, and are ready to support the work of the European Parliament and Council in the legislative process.

To close: We do not have all the answers. We are humbled by the scale of the work ahead, but inspired by Europe's ambition and are committed to being part of the solution.

Hélène Lavray, DOW, Government Affairs Leader EU-Energy and Climate

Electrification has become a central pillar of Europe's debate on climate, energy, and industrial policy. It is rightly seen as a key pathway to reduce emissions, modernize our energy system, and move towards climate neutrality.

From an industrial perspective, we fully recognize this potential. Electrification will play an important role in decarbonizing industry, including energy-intensive sectors such as chemicals.



But experience on the ground shows that electrification is not a simple switch. It is a system transformation, and its success depends on whether the right conditions are in place.

I would like to focus on three of those conditions: affordability, availability, and reliability.

- **Affordability.**  
If electrification is to scale across industry, electricity must be economically competitive. Today, however, electricity costs for industrial users in Europe remain structurally higher than in many competing regions. This is driven by a combination of high price but also taxes, levies, grid charges, and policy costs.

This matters because electrification requires very large, long-term investments. Companies can only take final investment decisions if they have confidence that operating costs – especially electricity – will remain manageable over decades.

It is telling that just last week Germany's energy regulator proposed that electricity producers – including renewable operators – should contribute to grid fees in order to finance the modernisation of transmission and distribution networks, given the growing share of intermittent renewables.

Back to prices, I would like to highlight that PPAs are not a silver bullet. They are primarily designed to make renewable projects bankable by shifting market risk away from developers. In practice, that risk is transferred to industrial consumers. PPAs prevent consumers from benefiting from low or negative market prices during periods of high renewable output, while exposing them to high prices when renewables are unavailable and gas sets the marginal price. Ironically, at the same time, large CfD programmes reduce PPA availability and push prices up.

If Europe wants industry to electrify at scale, electricity pricing, taxation, and cost allocation must be aligned with that objective – so that clean electricity becomes an enabler, not a constraint.

- **Availability.**  
Large-scale industrial electrification requires enormous volumes of power, delivered continuously and reliably. In many cases, these volumes are comparable to the electricity consumption of an entire city.

Electrification cannot progress faster than the infrastructure that supports it. Dow's largest industrial site in Europe – and our largest site globally outside the United States – is located in Terneuzen in the Netherlands, not far from here. The grid there is already congested, yet the planned new 380 kV high-voltage line is not expected before 2033 to 2035.

Renewables will clearly play a central role in Europe's future energy mix. But many industrial processes also require firm, predictable power. In fact, one of the biggest challenges for industry is not only electrification, but access to low-carbon, high-temperature heat and steam – which wind and solar alone cannot provide.

This is why a balanced discussion on all low-carbon energy sources, including nuclear, is essential.

Small modular reactors could be particularly relevant for chemical manufacturing sites – not only as a source of electricity, but also of heat. In that sense, small modular reactors [SMRs] could become the future equivalent of cogeneration units for our industry. Dow is already partnering with a technology company in Texas to develop SMRs at one of our U.S. sites. At the same time, for very large applications such as cracker electrification – with additional power needs well above 500 MW – SMRs may simply be too small, and large-scale nuclear may be more realistic.

- **Reliability and System Design.**  
Many industrial installations operate continuously, for reasons of safety, efficiency, and product quality. The steadily low capacity utilization in the chemical industry at a moment is a sign of poor economic performance and is leading to many closure decisions in the sector. Our ability to provide flexibility to the power system is therefore limited.

As electrification advances, market design, grid tariffs, and flexibility requirements must reflect these technical realities. A one-size-fits-all approach risks placing a disproportionate burden on energy-intensive baseload users. Flexibility is not universal — you cannot ask a 24/7 production process to be flexible.

Some argue that batteries can solve this, and while that may be technically possible, it requires significant additional capital investment. The key question is why scarce capital should be diverted away from decarbonizing our own industrial processes or feedstocks. Well-designed electricity markets can support electrification while preserving reliability, but this requires careful calibration and close dialogue between policymakers, system operators, and industry.

A final point on policy sequencing.

Electrification works best when enabling conditions come first: competitive electricity prices, adequate grid infrastructure, and regulatory frameworks that provide long-term predictability for investment. Transitional measures – such as state aid instruments or compensation for indirect costs – can play an important role while the energy system is still evolving. We also support exemptions from carbon costs where the necessary infrastructure is not yet in place.

Let me conclude with a simple message.

Dow supports electrification where it is cost-effective and system-friendly. But without affordable clean power, grid readiness, and appropriate policy safeguards, forced electrification risks shifting emissions – and accelerating de-industrialisation.



Staffan Rödjedal, VOLVO GROUP, Director Transport Industrial Transition

The Volvo Group, a European industrial manufacturer with global presence produces trucks, buses, construction equipment and marine engines, but no cars.

It is essential that different sectors collaborate to understand each other's abilities and constraints. We cannot solve this in silos. Together we can find solutions that safeguard the competitiveness of Europe.

We work with electrification in three main areas:

- electrification of our own industrial footprint, our Scope 1 and 2 emissions, where we are making solid progress, for instance our production plant here in Belgium is fossil free since 2007, first in automotive industry.
- decarbonization of freight transport, our Scope 3 emissions. Here we were market leader in Europe 2025, but this transition is still at an early stage.
- decarbonization of construction machinery – also Scope 3 emissions – a sector often neglected by policy makers – although it is responsible for an estimated 2% of all CO<sub>2</sub> emissions in Europe.

In all three cases, adding new electricity generation will not be enough. What is needed is predictable, local power that matches real demand profiles at competitive total system cost.

Power tariffs, grid fees and balancing costs all matter as much or more than the price of electricity itself.

For industrial electricity use, flexibility is limited. Our factories operate according to planned shifts, aligned with when employees are on site. Adjusting production to short-term electricity market signals typically leads to lost output, increased costs and reduced competitiveness. In most cases the level of cheap flexibility for us as a manufacturing industry is limited.

Heavy duty vehicles differ fundamentally from passenger cars. Trucks operate inside tightly connected logistics systems built on just-in-time deliveries to serve industries and consumers. If not arriving on time, in many occasions within a 15-minute time-slot, the transport company will get fined. Most trucks must charge once or twice per day, and the available power – especially for fast charging – must be both predictable and reliable.

Today the electricity markets are becoming increasingly complex. Power tariffs, demand-side flexibility mechanisms and balancing markets are being introduced with good intentions: to limit the cost of energy and keep the system stable. But the side effects are many new, and sometimes contradictory, signals that industries and charge-point operators must interpret. Companies need

new tools and competences simply to keep costs under control, and the benefits of this added complexity must clearly outweigh the additional administrative burden.

A recent example from Sweden of complexity is the intra-day balancing market, the manual Frequency Restoration Reserve, where Mega Watt Chargers, without booking day ahead, can create imbalance costs of up to €5,000 for one Megawatt Charging System [MGC] charging session of thirty minutes, for which the electricity itself costs approximately €200. We notice a tendency that the electricity sector wishes to forward these costs to industries and Charge Point Operators, which would add an unacceptable uncertainty for electrification. The imbalances need to be consolidated on a higher level.

To meet the CO<sub>2</sub> targets by 2030 for heavy duty trucks, where three out of ten trucks need to be electric, the enabling conditions must advance quickly over the next four years and continue to advance rapidly toward the 2035 target where 6 out of 10 trucks need to be electric.

To support such a fleet of 400,000 electric heavy-duty vehicles in just four years there is a need for a rapid expansion of grid hosting capacity. This is not business as usual. They need ~30GW of connections for fast charging and approximately the same magnitude for their night charging. It will require extraordinary efforts: anticipatory grid investments, digitalization of grids, faster permitting, availability of key components. The Grid Action Plan addresses several of these issues, but much of the responsibility now lies with the Member States, and the question is whether implementation will be fast enough.

The operating cost of electric trucks must be lower than for diesel. Energy taxation, the implementation of ETS II, and the Euro Vignette are among the most critical policy levers.

Let me conclude with five key points connected to electrification:

- We support the rapid transition to electrify freight transport. We have already invested heavily in this transition
- Local power availability must match industrial and HDV (transport) charging load profiles to safeguard productivity and competitiveness
- Major grid reinforcements and charging networks must be deployed within the next four years,
- Electricity prices – including power tariffs, balancing costs and taxes – must be competitive with fossil fuels.
- Electricity market signals should be kept as simple and consistent as possible.

Kathrin Glastra, ZVEI – Germany’s Electro and Digital Industry, Head of Brussels Office and European Affairs

ZVEI is the German Electro and Digital Industry association representing its common interests and associated service companies in Germany and internationally. The association has more than 1,100 member companies and 170 employees. At the end of 2024, the industry employed 900,000 people in Germany. This makes it the second largest industrial sector in our country. The sector’s 2024 turnover amounted to €220 billion.



The electro and digital industry is one of the most innovative economic sectors in Germany. Every year, the industry spends €22 billion on R&D and more than €9 billion

euros on investments. The energy sector is one of our so-called lead markets. Proud member of Orgalim and of T&D Europe. We at ZVEI are the ones with the “electrifying ideas”.

Our member companies are best categorised as system enablers. Just to give you an example: without high-performance power semiconductors, the efficient conversion and control of electricity in electric vehicles, industrial drives, or renewable energy systems would not be possible. These components are the technological core of electrification, enabling everything from fast-charging infrastructure to smart inverters in solar and wind power plants.

Another example is industrial connectivity and automation technology. Without intelligent sensors, control systems, and secure communication interfaces, the electrification of factories, buildings, and energy grids cannot be implemented on scale. But this is exactly what we need and want in Europe, right?! These technologies ensure that energy flows are monitored, optimised, and integrated across sectors– making sector coupling and demand-side flexibility a reality. In short: no electrification and no digitalisation without the technologies developed and produced by ZVEI member companies.

### Why Electrification Is Important

Our common goal of climate protection means decarbonisation, which involves switching to low-carbon/carbon-free energy sources.

Electrification, based on renewable energies, is the most effective way to decarbonise the European economy. Replacing fossil fuels with electricity, especially from renewable sources, offers the greatest energy efficiency and lowest emissions in sectors such as industry, transport, buildings and heating.

Let me highlight some often overlooked or not emphasised enough facts:

- Decarbonisation through electrification makes sense not only from a climate policy perspective, but also because it increases our European companies’ competitiveness, creates access to global future markets and strengthens energy sovereignty and resilience.
- Cost savings: The EU currently spends roughly €350–400 billion per year on fossil fuel imports, with costs fluctuating significantly depending on global energy prices (influenced by geopolitics). A more cost-efficient energy transition is possible through electrification, which could reduce specific electricity system costs. The transition to an electricity system based on renewables generation is necessary to reduce emissions.

At the same time, it presents an opportunity for lower energy prices, as better implementation could lead to a sustained decline in costs and significantly reduce specific electricity system costs in the long term. However, this requires better coordination on the European level regarding electrification, renewable energy supplies across borders and respectively also infrastructure expansion.

- Above all, decarbonising the energy system creates enormous potential for value creation in Europe – but also a participation in global growth markets.
- If Europe expands domestic production and secures critical supply chains, it can take a leading role in the markets for clean technologies, such as batteries, power electronics and smart grids. The further expansion of renewable energies for the energy transition is creating enormous growth markets, particularly in wind energy, hydrogen technologies, and grid technology associated with increasing electrification.

The electricity grid infrastructure is the backbone of both the climate transformation and a functioning economy. The electricity grid infrastructure sector alone is expected to reach a global market size of €350 billion by 2035, marking a 75% increase within ten years. A strong position in these markets, and the associated potential for value creation, is also significantly dependent on expanding the relevant infrastructure and promoting domestic production.

### What Are the Obstacles?

Currently, electricity accounts for just 23% of the EU's final energy consumption, a figure that has remained static for over a decade. However, to achieve the EU's climate targets, this figure must rise to 35% by 2030 and 61% by 2050. According to the International Energy Agency [IEA], China has increased its electrification rate by +3,8% in the past ten years, hitting almost 30%! So, there is clearly still a lot of room for improvement.

But despite its potential, electrification is not progressing quickly enough. The main obstacles include:

- High electricity prices: Electricity has been expensive in many EU countries for years due to taxes and levies, and it remains more expensive than fossil fuels. This undermines the competitiveness of companies operating internationally and, at the same time, hinders the transformation of the energy system towards the direct use of electricity from renewable sources, which is necessary to achieve climate targets.

In Germany, taxes, levies and surcharges account for around a third of electricity bills for household customers. For example, an electricity tax well above the European minimum rate (2.05 ct/kWh instead of 0.1 ct/kWh) is artificially inflating electricity — the energy source of the future.

- Bottlenecks in the electricity grid: European electricity grids are under pressure. Long lead times for new connections, insufficient digitalisation and insufficient investment in grid capacity are slowing down electrification.

Without powerful grids and sufficient grid connections, even key projects, such as data centres, large-scale storage facilities and large industrial plants, are at risk (think of Industrial AI!).

Also, let us consider data centres, for instance: another sad example from Germany: around 60 new data centre projects were registered in the (Brandenburg distribution network operator, surrounding area of Berlin) alone in 2024, with a total connection capacity of around 9,000 MW. For comparison, the current maximum annual peak load across the entire E.DIS grid is only ~2,400 MW. The requested power therefore exceeds the current grid capacity by a factor of 3–4. This demonstrates that grid connection alone is insufficient; the entire infrastructure must expand accordingly.

### What Is Needed

The potential benefits are enormous. In order to realise this potential, the EU needs a bold action plan for electrification:

- Set clear targets (e.g. 35% electrification by 2030)
- Reform energy taxation to make electricity more attractive
- Accelerate investment in the electricity grid and renewable energies
- Reduce dependencies and strengthen EU manufacturing
- Promote innovation and human resources development.

## MEP VIEWS



Thomas PELLERIN-CARLIN MEP (S&D, France) Industry, Research and Energy Committee  
Let me begin with a concern.

I am worried about the quality of the broader discussion currently taking place in Brussels on our energy system. Too often, we discuss isolated elements – electricity prices here, state aid there, grids somewhere else. But in reality, there is only one energy system. It is one puzzle, and all the pieces must fit together. That is the discussion we need to have in the coming months.

Allow me a brief question.

How many of you believe that Europe is consuming more electricity today than before COVID?  
Very few.

How many believe that Europe is consuming less? Most of you. You are correct.

We are consuming less electricity today than we did before COVID. Yet many policymakers in Brussels assume that electrification is already accelerating. It is not.

If we look at electrification as a share of total energy consumption, the EU is not only behind China –we are also behind the United States. And interestingly, electrification in the U.S. has progressed even in recent years, driven largely by market dynamics rather than explicit federal policy.

This should prompt reflection.

When we discuss industrial competitiveness, we often overlook a crucial chapter: the period between 2021 and 2023. Europe experienced the first gas shock in its history. That shock was the direct consequence of a strategic choice – the choice to rely on cheap Russian gas. That choice dates back to the 1980s and was reaffirmed repeatedly, including through projects such as Nord Stream 1 and Nord Stream 2.

The vulnerability we experienced did not begin in February 2022. Gas prices were already spiking in the summer of 2021. Our industrial competitiveness – in chemicals, glass, and other sectors – had become structurally dependent on cheap imported gas.

So, we face a strategic choice.

One option is what I would call fossil fuel nostalgia: attempting to return to cheap gas. But cheap gas comes at a geopolitical price. It requires dependence on gas-rich powers. It implies accepting strategic vulnerability in exchange for lower short-term energy costs.

The alternative is freedom energy. Can Europe be both free and prosperous while remaining structurally dependent on imported fossil fuels? I do not believe so.

True sovereignty requires accelerating electrification, investing in renewables, strengthening grids, and building an integrated energy system that reduces exposure to volatile global fossil markets. This does not mean ignoring industrial competitiveness – quite the opposite. It means addressing it through structural transformation rather than short-term dependency.

We need:

- A coherent vision for the entire energy system
- Faster electrification
- Massive investment in grids and flexibility
- Stable long-term frameworks for industrial electrification
- And an honest conversation about the geopolitical implications of our energy choices

If we fail to accelerate electrification, we will remain exposed to future fossil fuel shocks.

If we succeed, we can build an energy system that is cleaner, more competitive, and more sovereign.

This debate is therefore not only about electricity prices. It is about Europe's long-term freedom and prosperity.



Jutta PAULUS (GREENS, Germany) Environment Committee & Industry, Research and Energy Committee

It is vital that policymakers and industrial actors come together. The best policy we design in Brussels is worthless if it cannot be translated into action on the ground. At the same time, industry needs to understand what is shaping our thinking – and to provide input. Of course, we will not always take that input onboard 100 % – that is part of the democratic process.

Let me start with a point that made me slightly uneasy: the proposal for a fixed electricity price of €50 per megawatt hour.

It is not that I oppose affordable energy. Of course not. But we must think carefully about incentives.

If electricity is subsidised to a fixed price – whether €50, €80 or €20 – regardless of supply, demand or grid congestion, we remove the incentive for users to respond to system conditions. And flexibility is essential in a renewable-based energy system.

We need consumers – especially large industrial users – to adapt their demand to the reality of the grid. Without that incentive, we would need to massively overbuild both grids and renewable capacity just to accommodate inflexible consumption patterns. That would not be efficient.

Electrification is not only climate policy. It is industrial policy and energy security policy.

There has been much discussion about electrification rates in China. If we compare trajectories, we see that the EU experienced a sharper decline before beginning to recover. China's transition has been more continuous.

But the real surprise is India.

India is moving extremely fast. In major cities, electrification in transport – particularly two- and three-wheelers – is advancing rapidly. Within just a few years, electric rickshaws and scooters have largely replaced fossil-fuel vehicles in many urban areas. And they did this without Europe even paying much attention.

My concern is that if we cling too strongly to legacy industries and technologies, we risk missing the opportunity to lead in the technologies of the future.

Germany made this mistake once before. In 2012, policy decisions effectively halted the domestic solar industry. Researchers and companies relocated – many to China. Today, we see the result of that lost industrial opportunity.

We must not repeat that error with emerging technologies such as electrolysers. Europe still has technological advantages in certain areas, but our international competitors are moving quickly.

Too often, debates in the European Parliament ITRE Committee and in Plenary focus on protecting legacy business models. Those models relied on cheap Russian gas and fully amortised industrial assets. But we cannot compete globally on the basis of low labour costs or cheap fossil fuels.

It is also important to remember that higher energy prices in Europe are not new. Even decades ago, it was clear that energy in Europe was generally more expensive than in many other parts of the world. Yet European industry thrived.

Instead of focusing exclusively on lowering prices, we should examine the structural effects of high prices. Denmark offers a good example. After the oil crisis of the 1970s, Denmark chose to reduce vulnerability by prioritising energy efficiency. It became a global leader in doing more with less energy.

Electrification is part of that efficiency story. We do not need to replace every unit of primary energy one-to-one. Electrification often reduces overall energy demand because electric systems are inherently more efficient. We should not confuse primary energy with useful energy.

Sometimes, I wish more political debates were grounded in scientific understanding of energy systems.

Electrification is a strategic opportunity, but only if we design it intelligently, preserve the right incentives, and invest in future-oriented technologies rather than only defending the past.

## OPENING REMARKS – ENERGY SUPPLIERS



Tinne Van der Straeten, WINDEUROPE, CEO

Europe has an addiction to fossil fuels. It is an addiction that harms us in many ways. Among other things, it makes us extremely vulnerable to energy blackmail by foreign powers, making prices unpredictable.

Instead of seriously addressing this addiction, however, we continue to incentivise it. We actively encourage our private sectors to keep consuming fossil fuels. Take Germany and Poland as examples. For industrial consumers, electricity is taxed at around twice the level of gas! Electricity is penalised, while fossil fuels benefit from preferential treatment.

And this is not limited to just two countries. Across the continent, electricity consumption is taxed more heavily than gas.

This sends a completely contradictory signal. We say we want electrification, but our tax systems push consumers in the opposite direction. This behaviour is like knowing your friend is addicted to gambling and still offering to drive him to the casino.

And can you believe that in Greece, you pay for the public television broadcaster via your electricity bills? The same in France for some state employee pensions. These have nothing to do with energy use. And it should not be charged through power consumption. These levies need to be financed separately.

The Electrification Action Plan is our opportunity to fix this. It must clearly instruct EU Member States to reduce electricity taxes. And it also needs to call for the removal of non-energy-related levies from electricity bills.

In short, we must drastically lower electricity taxes and levies to stop disincentivising electrification.

This is the first of five priorities we need to get right to unlock Europe's full electrification potential.

If we succeed, we can reduce energy system costs and become more competitive. A renewables-based energy system would save Europe €1.6 trillion compared to a system in which we fail to deliver on net zero. That figure is equivalent to what Europe collectively spends on healthcare every year.

So, what are the other four priorities we need to deliver on?

- **We Need to Focus on the Low-Hanging Fruit.**  
Many cost-effective solutions already exist. Low - and medium-temperature industrial heat is one of the most important near-term opportunities. Around half of EU industrial process heat demand is below 500°Celsius. This demand can already be decarbonised using commercially available technologies such as heat pumps and electric boilers.

High-temperature decarbonisation pathways remain important. But over-emphasising longer-term solutions risks delaying immediate emissions reductions.

By prioritising deployable heat electrification, we can deliver quick and cost-effective results. We can strengthen demand for renewable electricity. And we can build industrial and political momentum for electrification.

- **We Must Address the Grid Bottleneck.**  
Today many energy consumers are ready and willing to electrify. They have identified projects. They have made investment plans.

But they cannot proceed because there is no grid connection available to power their newly electrified processes. Without access to the grid, electrification simply cannot happen.

We need to accelerate grid reinforcement, modernisation and expansion across Europe. Planning procedures must be faster. Permitting must be simpler.

To drive this, we must unlock funding from EU and national sources, which in turn will leverage private financing.

We also need to integrate non-fossil flexibility solutions. This includes energy storage, demand-side response and smarter system operation.

Stronger cross-border interconnectors and efficient electricity trading arrangements, including between the EU and UK, will further complement flexibility options and ultimately enhance our energy security.

Together, grid expansion and flexibility deployment can reduce system costs, improve reliability, and support the integration of growing volumes of renewable electricity.

- **We Must Improve Access to Capital.**

Electrification is extremely capital-intensive. It requires large upfront investments. And in Europe, capital remains expensive, in stark contrast to other players such as China.

This puts European industry at a disadvantage. Over the past ten years, China has increased its electrification rate from around 20% - 30%. Europe, by contrast, has been stuck at around 23% for many years!

Today, energy intensive industries struggle to make the business case for electrification work. High initial CAPEX, coupled with OPEX that is often higher than their current energy usage, means that the numbers do not add up. Yet these are exactly the industries that we need to electrify at speed.

Help our industries raise the capital and our electrification rates will rise too.

Public de-risking instruments can play a decisive role in unlocking private capital. We need to expand and deploy them more widely. Targeted instruments through better utilisation of public banks such as the European Investment Bank is the answer. That will unlock the private financing that is required.

- **Finally, We Also Need Investment Stability to Raise Capital At Scale.**

We cannot expect investors to make major financial commitments with time horizons stretching decades if market conditions and policy frameworks change every few years.

To maintain investor confidence, we must preserve the integrity and predictability of the EU Emissions Trading System. At the same time, we must ensure that closer collaboration and linkage via the ETS System with trusted third country markets is built into our strategy going forward. Failure to do so will result in problems being created that we should not have to deal with.

A credible and predictable carbon pricing trajectory is indispensable. It underpins the business case for renewable electricity generation. It supports industrial electrification. And it ensures the bankability of decarbonisation investments.

In addition, ensuring that Governments engage in risk sharing through mechanisms such as tripartite contracts – where industry commits to buy renewables at a set volume and price, project developers commit to building new wind farms, and public institutions provide regulatory certainty and financial incentives – will enhance investment security, reduce financing costs and ultimately lower electricity bills that enhances our competitiveness globally.

The Electrification Action Plan is a huge opportunity to fix Europe's energy system, making us more competitive and energy secure.

Delivering this vision requires regulatory stability, no market tampering, strong carbon pricing, competitive electricity taxation, modernised grids and effective financing frameworks.

The tools are available. The economics are clear. Now let us deliver.

## THE SUPPLY ANGLE – VIEWS FROM ENERGY SUPPLIERS



Wadia Fruergaard, VESTAS, Senior Director and Head of Policy and EU Affairs

Vestas, the largest global wind turbine manufacturer, is headquartered in Denmark with a strong manufacturing and supply base here in Europe, including 19,000 employees. My point today is simple: Europe's competitiveness will – to a large extent – be decided by whether we can deliver homegrown and affordable clean electricity – securely and at scale.

Electrification is an industrial backbone. But the business case for electrification is still not good enough. It is too expensive to electrify. According to WindEurope, European industry pays far higher electricity taxes and levies than the US or China, and in some EU countries, electricity is taxed more than gas. We need to work harder to deliver the demand side of industrial policy for Europe – and that also includes permitting and grids.

Permitting legislation is improved. The Renewable Energy Directive (REDIII) sets clear timelines and introduces acceleration and go-to areas. We have seen the results of implementing these mandates. Germany permitted 20 GW of onshore wind in 2025, a 276% increase on 2022. And, they have also decreased permitting time by 30%. What used to take years is now down to eighteen months.

We need all other Member States to follow suit. Faster, predictable permitting lowers risk, lowers financing costs and ultimately lowers consumer prices that supports an electrified Europe.

There is no electrification without grids. Grids remain a bottleneck. Connection queues are long and congestion issues persist. We have seen completed, GW scale, wind projects wait up to a year for their grid connection. The Grids Package will support cross-border projects and alleviate grid permitting challenges – but we need this level of action at national levels too. Grids must move from being a constraint to being an enabler.

And we need to do better on the supply side as well. The supply chain invests on multi-year horizons. Factories, equipment and people. These investments aren't sustainable in boom & bust cycles. Europe needs stable auction schedules, transparent multi-year volumes, and clear, consistent rules across Member States. Ambitions are there and we are coming around to the market realities that CfDs and PPAs support to de-risk projects. This is good. We now need implementation discipline.

Even more so on the supply side, we should re-think how we scale. Markets outside of Europe have shown how to support supply chains to produce more at home. By focusing support mechanisms on production, we already have – rather than always thinking new – supply chains that can secure the robustness to reinvest.

The fact is that it is expensive to scale in Europe. And regulation on what we should or should not build in Europe is not all that helpful. An industrial policy that focuses in tandem on demand

(electrification) and on the supply side (production) is needed to ensure a starting point for scaled and competitive supply chains.

Wind turbines are not just mechanical machines. They are advanced digital power plants connected to the cloud and to the grid. That brings incredible capability, but it also highlights the importance of safeguarding critical energy infrastructure. Once implemented, the Directive on Security of Network and Information Systems [NIS2] is a major step forward in cyber security. And together with the proposed Cyber Security Act we can ensure that cyber-resilience enables an electrified Europe.

If I may summarise, it is simply this: to electrify Europe, we need an industrial policy for wind:

- that focuses in tandem on demand and supply
- a secure infrastructure that enables it, and
- the implementation of efficient permitting mandates across Member States.

If we treat electrification as Europe's competitiveness agenda, we can deliver it together.

Heiko Willenberg, RWE, Head of Government Relations / Political Affairs



When we discuss the future of electrification in Europe, it is impossible to do so without considering its broader implications for our industrial landscape.

Electrification stands at the crossroads of several critical priorities: the European Commission's Clean Industrial Deal with the need for competitiveness and decarbonisation to work in tandem, and the pivotal role played by the EU Emissions Trading System. Only by addressing these interconnected elements can we hope to advance an industrial strategy that is both future-proof and resilient, ensuring a prosperous Europe for generations to come.

The European Commission's Clean Industrial Deal is setting the right priorities for our continent's future. However, it is crucial that we translate these objectives into concrete, bold actions if we are to make real progress.

Good intentions alone are not enough; what matters now is effective and timely implementation.

In this context, it is clear that competitiveness and decarbonisation must go hand in hand. Decarbonisation is not solely a matter of climate action; it is also integral to enhancing our security of supply and our strategic independence. At present, Europe remains heavily reliant on fossil fuel imports. By driving forward decarbonisation, we can strengthen our resilience to external shocks and reduce our dependency on external energy sources.

To ensure the Clean Industrial Deal delivers real results, we must focus our decarbonisation efforts where they are most cost-effective, guided by the cost curve and best practices. Prioritising efficient measures will make our climate transition both affordable and impactful.

For targeted decarbonisation, electrification will also play a fundamental role in this transformation. By increasing the use of clean electricity across industries, we can further accelerate progress toward net zero, foster innovation and resilience.

Moreover, it is important to acknowledge that de-carbonisation and electrification must occur in a market-driven and cost-efficient manner.

Here, the EU ETS, often referred to as the gold standard, serves as our most powerful tool. Through clear market signals, the ETS incentivises targeted investments, provides direct support to Member States' budgets for further decarbonisation, and guarantees that climate objectives are met by enforcing an overall emissions cap. The EU ETS is and must remain the main pillar for electrification, but it needs to be adapted to be fit for the new 2040 climate objective. The same applies for the EU ETS 2 which should be implemented in a timely fashion and perspective integrated with EU ETS 1.

However, we must be careful not to undermine this system. Imposing additional regulations on sectors already covered by the ETS only increases costs, without yielding extra CO<sub>2</sub> reductions - an example being the debate over defining 'green' hydrogen. We must avoid unnecessary overlaps that burden industry without providing additional benefits.

Securing Europe's future competitiveness also means looking ahead to new and emerging sectors. Artificial intelligence (AI), for instance, will play a decisive role in shaping our economy. At RWE, we are ready to power AI gigafactories with clean electricity in highly attractive locations, thereby supporting the industries of tomorrow and ensuring Europe remains a frontrunner in global innovation.

RWE stands fully committed to playing its part and continuing to invest heavily within the European Union. In return, we call for clear and reliable framework conditions to enable long-term investments. Now, more than ever, is the time for the EU to take decisive, courageous action; so that together, we can turn the game around and lead Europe into a sustainable, resilient, and prosperous future.



Liron Spinel, ENEL GROUP, Head of European Public Affairs  
*(revised text)*

Let me briefly introduce Enel. Enel is a global power player present in 28 countries, with a managed capacity of over 90 GW- of which approximately 68 GW is renewable. We have the world's largest private distribution grid, serving nearly 70 million end-users and leveraging Enel X's expertise in the E-Mobility ecosystem and advanced energy services.

I am going to focus on mobility, so let me start with what we call the "mobility paradox": Usage Boom vs. Investment Freeze.

As a global proxy for the energy transition, also in E-mobility, Enel's latest operational data reveals a striking market dichotomy and offers a critical reality check on the state of the sector. On the demand side, while the appetite for charging services is booming, the hardware investment side is signalling a freeze and the sale of physical charging points has plummeted. This divergence confirms that while drivers are more ready and are charging more than the past, the uncertainty in this sector is stalling CAPEX investments.

To bridge this gap, the Electrification Action Plan (EAP), working in conjunction with other proposals, must act as a market-maker. One of the most effective levers to unlock the mass market is a standalone regulation requiring electric vehicle adoption in corporate fleets, which we can already see under the Automotive Package: corporate fleets account for 60% of new car

registrations, drive more kilometres and feed the second-hand market, making EVs affordable for the average citizen. Simultaneously, we must mandate technical readiness for Vehicle-to-Everything (V2X) integration. This is not just a technicality; it is a structural shift that transforms EVs from passive loads into active grid assets, lowering costs for consumers and enhancing system flexibility.

An effective instrument to accelerate this transition would be the establishment of a European V2X Sandbox. Implemented under controlled regulatory and technical simplifications, such a sandbox would provide real-world evidence on the technical feasibility, economic viability and operational safety of bidirectional charging. Within this environment, several critical dimensions could be evaluated before full V2X market deployment, including: validating remuneration models for export and flexibility services through dynamic pricing and local market mechanisms; simplifying access rules for aggregators to enable multi-user aggregation with minimal administrative burden; and testing interoperability across diverse vehicle models, charging equipment, and aggregator platforms under real operating conditions.

Beyond mobility, the broader picture is concerning. Despite electric technologies being 3 to 6 times more efficient than their fossil fuel counterparts, electrification rates in the EU have effectively stagnated at less than 23% over the past ten years. The “business as usual” approach has clearly failed to align with 2030 targets.

The EAP must therefore serve as a governance shock. We advocate for the introduction of aspirational EU electrification targets and indicators from now to 2040, supporting the achievement of EU climate and energy objectives.

Let me now turn briefly to grids.

Electrification cannot happen in isolation. Power grids are the fundamental physical enablers of the transition. Yet today, we are attempting to run a modern energy transition on legacy infrastructure.

Approximately one-third of EU distribution grids are over 40 years old. These ageing networks create physical bottlenecks for decarbonization. The traditional regulatory model, which waits for congestion to appear before authorizing upgrades, is no longer fit for purpose.

The Electrification Action Plan must therefore be closely anchored to the European Grids Package and promote anticipatory grid investments. Regulators need to empower Distribution System Operators [DSOs] to invest and build capacity ahead of the demand curve, based on forward-looking planning rather than just current needs. This is a no-regret option essential to accommodate the influx of renewables and electric loads driven by the EAP itself. Furthermore, we must unlock flexibility: the Network Code on Demand Response should be leveraged to allow DSOs to procure market-based services, ensuring that new electric loads actively contribute to system stability rather than stressing it.

For both EU businesses and citizens, electrification is the primary path to decarbonization, but the economics must work. Currently, electricity is often penalized by a tax structure that favors fossil fuels. A key pillar of the EAP must be the removal of non-electricity related taxes and levies from electricity bills, ensuring a level playing field against carbon-intensive fuels.

Moreover, to further de-risk industrial electrification, we need to fully implement the Electricity Market Design, accelerating the uptake of PPAs and CfDs. Public guarantee schemes (e.g., via the EIB) are essential to mitigate counterparty risk and democratize access to long-term contracts.

The upscaling of the Industrial Decarbonisation Bank proposed by the Commission – up to the €100 Bn announced in the Clean Industrial Deal – shall also play a key role in mobilizing private

investments, dynamizing the introduction of new technological solutions in the market and facilitating decarbonized electrification for EU industries.

Additionally, we propose the creation of Electrification Acceleration Areas (EAAs) for industrial hubs and high-demand zones such as logistic hubs and densely populated urban areas. Modelled on renewable areas, these would be designated clusters where permitting is streamlined and grid access is prioritized for strategic industrial players.

Finally, let me address heat pumps.

The heat pump sector requires urgent attention. In 2023, the European market experienced a severe contraction. Sales fell significantly – by double-digit percentages in several Member States.

To reverse this, the Electrification Action Plan should as well address the cost and skills gaps.

Potential measures could include:

- Member States should be encouraged to apply reduced VAT rates for heat pumps
- Dedicated upskilling and reskilling programmes
- Stronger support for “one-stop-shop” services to guide consumers through the technical and financial complexity of switching, and all along the customer journey
- Demonstration projects across Europe to showcase successful implementation.

## MEP VIEWS



Bruno TOBBACK MEP (S&D, Belgium) Industry, Research and Energy Committee

Electricity consumption in Europe has indeed decreased. But that is only half the story. Final energy consumption in Europe has fallen by around 13% since 2005. Meanwhile, renewable energy production has more than doubled over the same period.

Yes, electrification is moving faster in the United States. But let us be honest about why: massive investment in data centres, which consume enormous amounts of electricity. That is a very specific dynamic.

I would like to inject a bit of positivity into this debate.

If we look at the European energy landscape over the past two decades, we see remarkable progress. Renewable generation has doubled. Several Member States – Spain, Portugal and others – have reached 75–80% renewable electricity production. Even Germany is not far behind.

In Belgium, the development of offshore wind has created approximately 250 new companies and around 11,000 jobs in a sector that barely existed a decade ago. That is growth. That is opportunity.

Let me use a metaphor.

Let us call the emerging renewable and electrified economy “Team Hamburg.” It is growing. It is investing. It is hiring. It is building new capacity and expanding across Europe.

And then there is “Team Antwerp” — representing traditional, fossil-based heavy industry. I say this with sympathy, especially as a Belgian. But if we look at job creation, growth and investment over the past decade, we do not see the same expansion. We see stagnation.

Am I blaming anyone? Absolutely not.

I am a Socialist. I care deeply about industry. It is where my voters work. I want successful, profitable industry that pays good wages.

But Europe must focus on its future, not its past.

We will need to support parts of traditional industry in their transformation. That may require subsidies. However, two points are essential:

- the money for that transition will come from a functioning Emissions Trading System (ETS). If we undermine the ETS, we undermine our capacity to finance the transformation. The old will, in part, pay for the new — because there is no alternative funding source at scale.
- subsidies must be linked to credible transition plans.

The key question is not “How much would it cost to subsidise fossil-based production to reach €50 per megawatt hour?” The real question is: for how long would we need to do that?

If the model remains fossil-dependent, the answer is indefinitely. That is not viable.

We cannot turn Europe into the most expensive industrial graveyard in human history. Nor can we divert resources from the industries of the future to indefinitely support models that cannot transition.

That is the choice before us.

People invest where there is success. Investors, entrepreneurs and citizens want to be part of a winning story. And we have one.

No new home in Belgium is built today without a heat pump – not only because of regulation, but because it makes sense.

Corporate fleet electrification is accelerating. Once people drive electric, they rarely want to return to combustion vehicles. Overall car sales may fluctuate, but electric vehicle sales continue to grow strongly across Europe.

We spend far too much time defending the 2035 targets and justifying the transition. Instead, we should be highlighting where the market is already moving.

If you want demand for wind turbines, you need customers.

If you want investment in grids, you need electrified consumers.

If you want political support for the ETS, you must show that it finances opportunity and growth.

The transition will not happen overnight. I do not even have a heat pump at home – yet. But when I renovate, I will install one. That is how change happens: gradually, but steadily.

History teaches us something simple. When word processors replaced typewriters, the typewriter industry disappeared. Do we regret that? Have we become poorer because of it? Of course not.

If we want an industrial future in Europe – if we want prosperity, sovereignty and climate responsibility – there is only one direction.

So yes: go Team Hamburg.

Let us back the industries that are growing, innovating and creating the jobs of tomorrow.

CONCLUDING REMARKS



Antony Fell, EUROPEAN FORUM FOR MANUFACTURING, Secretary General

The EU Electrification Action Plan is a critical opportunity for Europe’s decarbonisation. This debate tonight, therefore, has been a very important one.

I would like to thank our Parliamentary Host Radan Kanev from EPP and the MEPS, Bruno Tobback from the S&D Group and Jutta Paulus from the Greens Group.

The Commission’s lead contribution by Lukasz Kolinski Director for the Green Transition and Energy System Integration provided a good introduction to the topic as well as the informal Commission response.

In concluding the EFM dinner debate I would like to express our appreciation of the event partnership with WindEurope, their Director Phil Cole and its new CEO, Tinne van der Straeten.

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